



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Gilbert Wolrich et al.

Art Unit \ : 2186

Serial No. : 10/070,006

Examiner : Behzad Peikari

Filed : February 28, 2002

Title : DOUBLE SHIFT INSTRUCTION FOR MICRO ENGINE USED IN
MULTITHREADED PARALLEL PROCESSOR ARCHITECTURE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050, reference 10559-302US1.

Respectfully submitted,

Date: 6/2/04

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Substitute Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.99(b))	Attorney's Docket No. 10559-302US1	Application No. 10/070,006
	Applicant Gilbert Wolrich et al.	
	Filing Date February 28, 2002	Group Art Unit 2186

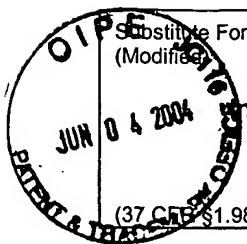
Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AA	WO 01/50679	07/12/2001	WIPO				
	AB	WO 01/50247	07/12/2001	WIPO				
	AC	WO 01/48619	07/05/2001	WIPO				
	AD	WO 01/48606	07/05/2001	WIPO				
	AE	WO 01/48599	07/05/2001	WIPO				
	AF	WO 01/48596	07/05/2001	WIPO				
	AG	WO 01/41530	06/14/2001	WIPO				
	AH	WO 01/16782	03/08/2001	WIPO				
	AI	WO 01/16770	03/08/2001	WIPO				
	AJ	WO 01/16769	03/08/2001	WIPO				
	AK	WO 01/16718	03/08/2001	WIPO				
	AL	WO 01/15718	03/08/2001	WIPO				
	AM	WO 97/38372	10/16/1997	WIPO				
	AN	WO 94/15287	07/07/1994	WIPO				
	AO	EP 0 809 180	11/26/1997	Europe				
	AP	EP 0 745 933	12/04/1996	Europe				
	AQ	EP 0 633 678	01/11/1995	Europe				
	AR	EP 0 464 715	01/08/1992	Europe				
	AS	EP 0 379 709	08/01/1990	Europe				
	AT	59111533	06/27/1984	Japan				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AU	Agarwal et al., "April: A Processor Architecture for Multiprocessing," Proceedings of the 17 th Annual International Symposium on Computer Architecture, IEEE, pp. 104-114.
	AV	Byrd et al., "Multithread Processor Architectures," <i>IEEE Spectrum</i> , Vol. 32, No. 8, New York, 1 August 1995, pp. 38-46.
	AW	Chang et al., "A New Mechanism For Improving Branch Predictor Performance," IEEE, pp. 22-31 (1994).

Examiner Signature	Date Considered
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 Substitute Form PTO-1449
 (Modified)

 U.S. Department of Commerce
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 Attorney's Docket No.
 10559-302US1

 Application No.
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**Information Disclosure Statement
 by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

 Applicant
 Gilbert Wolrich et al.

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 Group Art Unit
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Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AX	Doyle et al., <i>Microsoft Press Computer Dictionary</i> , 2 nd ed., Microsoft Press, Redmond, Washington, USA, 1994, p. 326.
	AY	Farkas et al., "The multicluster architecture: reducing cycle time through partitioning," IEEE, vol. 30, December 1997, pp. 149-159.
	AZ	Fillo et al., "The M-Machine Multicomputer," IEEE Proceedings of MICRO-28, 1995, pp. 146-156.
	AAA	Gomez et al., "Efficient Multithreaded User-Space Transport for Network Computing: Design and Test of the TRAP Protocol," <i>Journal of Parallel and Distributed Computing</i> , Academic Press, Duluth, Minnesota, USA, vol. 40, no. 1, 10 January 1997, pp. 103-117.
	ABB	Haug et al., "Reconfigurable hardware as shared resource for parallel threads," IEEE Symposium on FPGAs for Custom Computing Machines, 1998.
	ACC	Hauser et al., "Garp: a MIPS processor with a reconfigurable coprocessor," Proceedings of the 5 th Annual IEEE Symposium on Field-Programmable Custom Computing Machines, 1997.
	ADD	Hennessy et al., "Computer Organization and Design: The Hardware/Software Interface," Morgan Kaufman Publishers, pp. 476-482 (1998).
	AEE	Hyde, R., "Overview of Memory Management," <i>Byte</i> , vol. 13, no. 4, 1998, pp. 219-225.
	AFF	Intel, "IA-64 Application Developer's Architecture Guide," Rev.1.0, May 1999, pp. 2-2, 4-29 to 4-31, 7-116 to 7-118 and c-21.
	AGG	Keckler et al., "Exploiting fine grain thread level parallelism on the MIT multi-ALU processor," IEEE, June 1998.
	AHH	Litch et al., "StrongARMing Portable Communications," IEEE Micro, 1998, pp. 48-55.
	AII	Mendelson et al., "Design Alternatives of Multithreaded Architecture," <i>International Journal of Parallel Programming</i> , vol. 27, no. 3, Plenum Press, New York, USA, June 1999, pp. 161-193.
	AJJ	Paver et al., "Register Locking in Asynchronous Processor Computer Design: VLSI Processors," ICCD '92 Proceedings, IEEE 1992 International Conference, 1992, pp. 385-398.
	AKK	Schmidt et al., "The Performance of Alternative Threading Architectures for Parallel Communication Subsystems," Internet Document, <i>Online</i> , 13 November 1998.
	ALL	Thistle et al., "A Processor Architecture for Horizon," IEEE, 1998, pp. 35-41.
	AMM	Tremblay et al., "A Three Dimensional Register File for Superscalar Processors," IEEE Proceedings of the 28 th Annual Hawaii International Conference on System Sciences, 1995, pp. 191-201.
	ANN	Trimberger et al., "A time-multiplexed FPGA," Proceedings of the 5 th Annual IEEE Symposium on Field-Programmable Custom Computing Machines, 1998.
	AOO	Turner et al., "Design of a High Performance Active Router," Internet Document, <i>Online</i> , 18 March 1999.
	APP	Vibhatavani et al., "Simultaneous Multithreading-Based Routers," Proceedings of the 2000 International Conference of Parallel Processing, Toronto, Ontario, Canada, 21-24 August 2000, pp. 362-359.
	AQQ	Waldspurger et al., "Register Relocation: Flexible Contents for Multithreading," Proceedings of the 20 th Annual International Symposium on Computer Architecture, 1993, pp. 120-130.
	ARR	Wazlowski et al., "PRSIM-II computer and architecture," IEEE Proceedings, Workshop on FPGAs for Custom Computing Machines, 1993.

Examiner Signature

Date Considered

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